

February 25, 2013

Mr. Roy Crossland START Project Officer U.S. Environmental Protection Agency-TLC 8600 NE Underground Drive, Pillar 253 Kansas City, Missouri 64161

Subject: Addendum to Quality Assurance Project Plan

Atlantic Water Supply, Atlantic, Iowa

U.S. EPA Region 7 START, Contract No. EP-S7-06-01, Task Order No. 0278

Task Monitor: Susan Fisher, EPA On-Scene Coordinator

Dear Mr. Crossland:

Tetra Tech EM Inc. is submitting the attached addendum to the Quality Assurance Project Plan for soil and groundwater sampling activities at the Atlantic Water Supply site in Atlantic, Iowa. If you have any questions or comments, please contact the project manager at (816) 412-1788.

Sincerely.

David Zimmermann, CHMM

START Project Manager

Ted Faile. PG. CHMM START Program Manager

Enclosure

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ADDENDUM TO THE QAPP FOR THE ATLANTIC WATER SUPPLY SITE ATLANTIC, IOWA Task Order No. 0278

This document is an addendum to the Quality Assurance Project Plan (QAPP) dated May 30, 2012, for soil and groundwater sampling activities at the Atlantic Water Supply site in Atlantic, Iowa. The previous QAPP submitted by the Tetra Tech Superfund Technical Assessment and Response Team (START) under Task Order 0278 remains the primary guidance document for this activity. The intent of this additional investigation is to further define the northern and western extent of contaminated soil.

Field activities described in the original QAPP were completed in October 2012. In the original QAPP, 20 soil sampling locations were proposed for the suspected source area. The locations were established on a grid with nodes about 5 yards apart. At each location, continuous membrane interface probe (MIP) logs were generated initially, with follow-up soil sampling at 10 of the locations for fixed laboratory volatile organic compound (VOC) analysis. Field decisions resulted in fewer samples within the probable source areas and more sampling locations farther to the north, south, east, and west. Analytical results from the October 2012 field investigation documented tetrachloroethene (PCE) contamination in deep soils within the source area, but not at locations outside of this area. The source area was once the location of a drycleaners and Iowa Department of Transportation (IDOT) materials testing laboratory. The building housing those operations was razed in the mid-1980s, and the location is currently a concrete parking lot. West of this parking lot is a 5,400-square-foot professional office building. The highest concentrations found during the October 2012 sampling event were within the central, western, and northwestern portions of the parking lot. The sample location nearest to the professional office building was approximately 20 feet east of that building. Further, sub-slab soil vapor samples collected in January 2013 from under the office building contained PCE at concentrations as high as 2,261 micrograms per cubic meter. The proximity of the documented contaminated soil to the sub-slab soil vapors suggest that soils under the building may be contaminated. Before drilling through the building's concrete slab will occur, subsurface soils will be collected as close to the building as possible.

Additional Soil Sampling

Seven Geoprobe[®] soil borings will be advanced to further define the horizontal extent of contamination in soil to the immediate north and west of the source area. At each boring, discrete samples will be collected at three depths. These depths are based on previously obtained electrical conductivity logs from the October 2012 sampling. At each boring location, soil samples will be collected from depths of 8 to 9 feet

below ground surface (ft bgs), 19 to 20 ft bgs, and 27 to 28 ft bgs. The samples will be collected for analysis for VOCs. Sample collection procedures will follow guidelines established in the EPA Standard Operating Procedures (SOP) described in the original QAPP. Anticipated locations of the seven additional borings are shown on Figure 1.

Proposed is analysis of 21 soil samples via EPA Region 7 laboratory Standard Operating Procedure (SOP) 3230.15D. Standard detection limits and turnaround times for all analyses will be sufficient for the sampling activities.

APPRØVED BY:	
Wined a Zimman	2-25-13
David Zimmermann, CHMM, START Project Manager	Date
	2-25-13
Ted Faile, PG, CHMM, START Program Manager	Date
Kathelen Domer	2-25-13
Kathleen Homer, START Quality Assurance Manager	Date
Susan Fisher, EPA On-Scene Coordinator, Superfund Division	Date
Diane Harris. EPA Region 7. Quality Assurance Manager	Date

